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ART UNIT	PAPER NUMBER
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NOTIFICATION DATE	DELIVERY MODE
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on *26 May 2009*.
2a) ☐ This action is **FINAL**.   2b) ☒ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) *1-63* is/are pending in the application.
    4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) *1-63* is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.
10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
    a) ☐ All   b) ☐ Some * c) ☐ None of:
      1. ☐ Certified copies of the priority documents have been received.
      2. ☐ Certified copies of the priority documents have been received in Application No. _____.
      3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)
1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
    Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Response to Amendment

1.   In response to the Final Office Action mailed 2/25/09, applicant has submitted an

amendment and Request for Continued Examination filed 5/26/09.

Claims 1, 23, 33, 60-63, have been amended.

Response to Arguments

1.   Applicant's arguments with respect to claims 1, 23, 33, and 60-63, have been

considered but are moot in view of the new ground(s) of rejection.

2.

3.   Applicant's arguments filed 5/26/09 have been fully considered but they are not

persuasive.

Applicant argues that a reference in a field different from that of Applicant's field

of endeavor may be reasonably pertinent if it is one, which, because of the matter with

which it deals, logically would have commended itself to an inventor's attention

considering his or her invention as a whole, citing <u>KSR v. Teleflex</u> which states "any

need or problem known in the field of endeavor at the time of invention and addressed

by the patent can provide reason for combining the elements in the manner claimed".

(Amendment, page 14)

However, the requirement to evaluate a <u>claimed</u> invention as a whole does not

require that each and every term in applicant's <u>claims</u> be given the intended meaning in

applicant's <u>Specification</u>. What is claimed can either be broader or narrower in scope to whatever applicant describes in detail in the Specification. Therefore, all that is required is to address all of the limitations in the <u>claim</u> because the claim limitations contain the <u>claimed</u> invention. As long as each and every limitation is addressed what is claimed <u>in its entirety</u> is addressed (i.e., <u>as a whole</u>). As KSR states, <u>any</u> need or problem known in the field can provide a reason to combine elements and specifically there is no need for the problem to be applicant's exact problem and the prior art references are not limited to the problem applicant is trying to solve.

The Supreme Court in KSR v. Teleflex also made it clear that "the [obviousness] analysis need not seek out precise teachings directed to the specific subject matter of the challenged claim an" and can take into account inferences that a person of ordinary skill in the art would employ. 82 USPQ.2d, 1385, 1396 (2007) (end of 2nd full paragraph). In <u>W.L. Gore v. Garlock</u>, the court held that the claimed invention was not obvious as a whole because the prior art references used in the combination taught away from the 500% stretch because while one reference taught stretching, it also taught that stretching to 500% was not possible and the claim included a 500% stretch. In this case, it is not an issue of what the claim language meant because there is no ambiguity between the word "stretch" and "500%" or "5 times" the original length given the context. The issue of treating the claim as a whole was whether or not the prior art actually taught the limitations in the claim. It does not say that the claims must be interpreted exactly as applicant intended.

Therefore, as long as each and every claim limitation is addressed in the claims, the claimed invention is evaluated as a whole (i.e., that nothing in the whole claim was missed in the analysis). Evaluating a claim as a whole does not require that the described invention be taught by the prior art in its entirety because, as discussed above, there is a distinction between a described invention and a claimed invention since what is claimed may be broader or narrower in score to what is described.

In this case, unlike in Gore, no approximation or something "close enough" to the claim language was applied without the articulated reasoning required in KSR.

Applicant argues that Shambaugh was misinterpreted and does not apply because Shambaugh's scripting system may extend story lines or detect differences, while applicant's invention is a functionality based on input, and if the input is accurate, the ASR component gives a numerical score and responding with a quality insurance action. (Amendment, page 16).

However, as discussed above, applicant's intended invention need not be exactly what is addressed if the claims are broader in scope. The claims require "applying set of action rules to an output of the comparing [where the comparing is the comparing of panel-level segments to the automatic speech recognition analyzed voice interaction] to direct a quality assurance action to be taken".

Shambaugh's teaching reads on this because he displays portions of a script to be read by an agent on a screen. Only a fragment of the script is displayed at a time, and so for an entire script, there is a portion (i.e., a segment) that fits on the screen (where the screen is a panel because it is a flat display that contains a subset of

information (col. 6, lines 4-20). Shambaugh also teaches recognition of the agent's

spoken words with the script displayed to the agent (col. 6, lines 4-20). The agent's

spoken words are therefore automatic speech recognition analyzed voice interactions

because the agent interacts with the system by speaking and a speech recognizer

recognizes the voice. There is also a comparison being made by the system to see if

the agent followed the script. Since the only available data to be compared is a

recognized set of words by the agent and the displayed words on the screen, this is a

comparison of the panel-level segments (displayed on the screen) with the recognized

voice interaction (generated from recognizing words spoken by the agent).

Shambaugh teaches recognizing that there are differences between the script

because he teaches that differences may be incorporated into the script (col. 6, lines 4-

20). There must be some sort of comparison to ascertain what the differences are

because without a comparison the system would not know that any differences exist.

These differences are output by this comparison because otherwise there would be no

way for the system to know what to add to the script

In response to detecting the differences, and in response to a determination that

the agent is successful, the differences are incorporated into the script. This reads on

applying a set of action rules to an output of the comparing to direct a quality assurance

action to be taken, because, for example, rules frequently involve an if-then format.

Shambaugh defines that if there is a successful agent and if there is a difference in the

script, then the differences are incorporated into the script. Therefore, the determination

by the system to incorporate a difference follows a rule. This is a quality assurance

action that is performed when the rule is satisfied because the system is trying to

incorporate successful tactics into its system, and successful tactics are designed to

improve [and thus assure] quality.

An additional rule by the system could, for example, be to determine what

subtleties come with the differences [output of the comparing] output by the script

comparison device. Since there are multiple actions performed in response to an output

difference (e.g., insert difference into script, derive pitch and word rate from difference),

there is a corresponding set of rules in the system to tell it to act on the differences (i.e.,

if there is a difference, then add it to the script, if there is a difference, then determine

parenthetical instructions to be added to the script).

Therefore, Shambaugh teaches applying a set of action rules to an output of the

comparing to direct a quality assurance action to be taken. Without further clarifying

what the rules are or what the output of the comparing is, and/or clarifying that the

output must include a numerical score, Shambaugh reads on the claim language.

Applicant also argues that Yuschik does not teach assigning a panel-level time

displacement stamp to each panel. Applicant argues that "timing for the flow of a

dialogue between a user and the VA UI" is the only thing that mentions time and does

not state anything inherently/directly about a timestamp. Applicant also argues that

applicant's timestamp is used so that a viewer can choose a panel to view by a specific

time, and in Yushick, it is duration of message time available (Amendment, page 17).

Again, applicant's claim language is broader in scope than what applicant argues his timestamp to be. A timestamp, or as claimed, a panel-level time displacement stamp assigned to each panel, only needs to be a time indicator or some sort. Time is not limited to an indicator for when a viewer should choose a panel. Duration is also an indicator of time. There is also no requirement that a timestamp be displayed on a panel as claimed.

Yuschik teaches that the call flow of a dialogue has specific timing associated with it. A dialogue flow involves the sequence of interactions between a system/agent and a user (e.g., Ask Name-->[user speaks name]-->Ask Location→[user speaks location]→etc.) Therefore, an agent's reading of a script contributes to the dialogue flow.

In Shambaugh, only a portion of the script is displayed at a given time. This portion is changed because otherwise the agent would not know what to speak after the displayed portion is read. Each portion also corresponds to a portion/state of a dialog because the agent is interacting with a caller. Shambaugh, however, does not specifically teach that the changed display (i.e., the panel) is changed based on an amount of time.

Yuschik, however, teaches that a call/dialog flow has a particular timing corresponding to each state/part (e.g., Ask Name, [user speaks name]) of the dialog. Therefore, Yuschik teaches that there is some indication of time to tell the system that the dialog is to move from one state to another. Since the displayed portions/panels correspond to a state in the dialog (where either the agent is speaking or the caller is

speaking), the combination teaches where the panels/states have a timing indicator to tell the system to move the dialog along. This timing indicator reads on a time-stamp assigned to a panel because it communicates a time characteristic related to a specific state in the dialog, where the specific state determines what is displayed to the agent [i.e., panel].

Therefore, Yuschik does teach where a panel-level displacement stamp is assigned to each panel because the claim language only requires a timing indicator associated with a text displayed to an agent, and Yuschik teaches where a timing indicator relates to a dialog state, where the dialog state relates directly to what is displayed [in a panel] in Shambaugh.

Applicant does not claim that the time-stamp is a piece of text with a specific numerical time displayed next to a specific sentence in the script on the displayed panel. Applicant also does not claim where the time related to the time-stamp communicates the time that a "viewer can choose a panel to view by a specific time".

Therefore, since applicant does not claim the specific details of what a "time" and "time-stamp" are, alternate interpretations including "duration of a portion of a dialog" and "timing indicator" also fall within the scope of the claim language, and can be properly used to reject the claims. This is because "time" and "time-stamp" are broader in scope than applicant's intended definitions.

If these specific details are incorporated into the claims, then it would have the effect that applicant argues in the Remarks on pages 16 and 17, but until the claim

language further defines these terms, applicant's intended definitions cannot be read

into the claims.

Claim Rejections - 35 USC § 103

2.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-10, 12-16, 18, 20, 23-63, are rejected under 35 U.S.C. 103(a) as being

unpatentable over Garcia (US 2003/0007612), in view of Shambaugh et al. (US

6,970,821), hereafter Shambaugh, Yuschik (US 6,526,382), and Young et al. (US

2003/0154072; continuation of 09/535,155, filed 3/24/2000, which incorporates the cited

passages), hereafter Young.

As per claim 1, Garcia teaches, "a method for evaluating compliance of at least

one agent reading at least one script to at least one client", the method comprising at

least the following:

"conducting at least one voice interaction between the at least one agent and the

at least one client, wherein the at least one agent follows the at least one script"

(paragraphs 0012 and 0013);

"evaluating the at least one voice interaction with at least one automatic speech recognition component adapted to analyze the at least one voice interaction" (paragraph 0047); and

Garcia fails to teach determining whether the at least one agent has adequately followed the at least one script, by dividing the voice interaction into viewable panel-level segments and comparing the panel-level segments to the automatic speech recognition analyzed voice interaction, applying a set of action rules to an output of the comparing to direct a quality assurance action to be taken, and wherein the action rules comprise a quality assurance action taken.

Shambaugh teaches determining whether the at least one agent has adequately followed the at least one script ("compare the script presented to the selected agent with the recognized words... used by the agent", col. 6, lines 4-20), by dividing the voice interaction into viewable panel-level segments ("display an initial portion of the script", col. 3, lines 53-61; where a portion is put into the screen where the portion of the screen that the portion is displayed on is a "panel") and comparing the panel-level segments to the automatic speech recognition analyzed voice interaction ("compare the script presented to the selected agent with the recognized words... used by the agent", col. 6, lines 4-20)

applying a set of action rules to an output of the comparing to direct a quality assurance action to be taken, and wherein the action rules comprise a quality assurance action taken ("scripting system may extend the storyline", col. 5, lines 28-43; "detect any differences... incorporated into script... incorporate subtleties...

parenthetical instructions", col. 6, lines 4-20; "objective", col. 6, lines 28-37; where a difference between the script and agent speech is an output of the comparing and also "if there is a difference and if the agent is successful, then add the difference to the script" and "if there is a difference to be added, determine corresponding parenthetical instructions" are rules applied to the difference/output to improve the odds that sales will be successful, which assures quality).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to modify Garcia to include the teaching of Shambaugh of determining whether the at least one agent has adequately followed the at least one script, by dividing the voice interaction into viewable panel-level segments and comparing the panel-level segments to the automatic speech recognition analyzed voice interaction, applying a set of action rules to an output of the comparing to direct a quality assurance action to be taken, and wherein the action rules comprise a quality assurance action taken, in order to determine whether an agent is successful or not, as described by Shambaugh (col. 6, lines 5-7).

Garcia, in view of Shambaugh, fail to teach wherein a panel-level time displacement stamp is assigned to each panel.

Yuschik teaches wherein a panel-level time displacement stamp is assigned to each panel ("menu states… and timing for the flow of a dialogue", col. 5, line 61 – col. 6, line 12; "easy to understand… signal when it is time for the user to respond", col. 14, lines 1-13).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to modify Garcia, in view of Shambaugh, to include the teaching of Yuschik, in order to provide fluid and productive dialog with a user, as described by Yuschik (col. 14, lines 1-13).

Garcia, in view of Shambaugh and Yuschik, fail to teach wherein the output can include a numerical score indicating a degree to which the at least one agent adequately followed the at least one script, and where the action taken is based on the numerical score.

Young suggests wherein the output can include a numerical score indicating a degree to which the at least one agent adequately followed the at least one script, and where the action taken is based on the numerical score ("score… that measures the correspondence of the agent's speech with the provided script", paragraph 37; "readability... overwhelm callers with technical jargon", paragraph 38; where the logical response to a script with overwhelming technical jargon is to modify it, as Shambaugh does).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to modify Garcia, in view of Shambaugh and Yuschik, to include the teaching of Young of wherein the output can include a numerical score indicating a degree to which the at least one agent adequately followed the at least one script, and where the action taken is based on the numerical score, in order to ensure that calls are handled consistently in a desired manner, as described by Young (paragraph 3).

As per claim 2, Garcia teaches, "wherein conducting at least one voice interaction includes conducting at least one voice interaction involving a telemarketing agent" (paragraph 0049).

As per claim 3, Garcia teaches, "wherein conducting at least one voice interaction includes conducting at least one voice interaction governed by at least one script that includes text corresponding to at least one offer of at least one of goods and services" (paragraph 0049).

As per claim 4, Garcia teaches, "wherein conducting at least one voice interaction includes conducting the at least one voice interaction at least in part on at least one communications network" (paragraph 0047).

As per claim 5, Garcia teaches, "wherein conducting at least one voice interaction includes conducting the at least one voice interaction at least in part on a publicly switched telephone network (PSTN)" (paragraph 0045).

As per claim 6, Garcia teaches, "wherein conducting at least one voice interaction includes conducting the at least one voice interaction at least in part on at least one Internet" (paragraph 0029).

As per claim 7, Garcia teaches, "wherein conducting at least one voice interaction includes conducting the at least one voice interaction at least in part on at least one communications network having at least one wireless component" (paragraph 0040).

As per claim 8, Garcia teaches, "wherein conducting at least one voice interaction includes conducting at least one telephone call " (paragraph 0040).

As per claim 9, Garcia teaches, "wherein conducting at least one voice interaction includes conducting at least one telephone call that is initiated by the at least one client" (paragraph 0043).

As per claim 10, Garcia teaches, "wherein conducting at least one voice interaction includes conducting at least one telephone call that is initiated by an entity other than the at least one client" (paragraph 0046).

As per claim 12, Garcia teaches, "further comprising performing at least one action based upon at least one result of the evaluating of the at least one voice interaction" (paragraph 0047).

As per claim 13, Garcia teaches, "wherein performing at least one action includes transmitting at least one signal to the at least one agent" (paragraph 0048).

As per claim 14, Garcia teaches, "wherein performing at least one action includes transmitting at least one signal to at least one reviewing authority" (paragraph 0049).

As per claim 15, Garcia teaches, "wherein performing at least one action includes making at least one entry in at least one script compliance incentive system" (paragraph 0012).

As per claim 16, Garcia teaches, "further comprising reviewing at least one determination of whether the at least one agent has adequately followed the at least one script" (paragraph 0012).

As per claim 18, Garcia teaches, "wherein evaluating the at least one voice interaction includes evaluating a plurality of panels" (paragraph 0049).

As per claim 20, Garcia teaches "further comprising comparing data representing an actual duration of at least one interaction, wherein the at least one agent reads at least one script to the at least one client, to data representing an expected duration parameter associated with the at least one interaction" (paragraph 0054).

As per claims 23-63, they are interpreted and thus rejected for the same reasons set forth in the rejection of claims 1-10, 12-16, 18 and 20.

1.   Claims 11, 17, 19, 21, 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Garcia (2003/0007612), in view of Shambaugh, Yuschik, and Young, as applied to claim 1 above, and further in view of Rtischev et al. (US 5,634,086).

As per claim 11, Garcia teaches, standard voice interaction IVR and voice recognition is used to automatically routing the call (Paragraphs 0044 and 0047). Garcia, in view of Shambaugh and Yuschik, do not explicitly teach, "wherein evaluating the at least one interaction includes at least the following: converting the at least one voice interaction into at least one digital signal comprising at least one spectral representation of the at least one voice interaction, comparing the at least one digital signal to at least one reference standard that includes at least one known vocabulary, and matching the at least one digital signal to at least one of words and phrases contained in the at least one reference standard". However, Rtischev teaches, "wherein evaluating the at least one interaction includes at least the following: converting the at least one voice interaction into at least one digital signal comprising at least one

spectral representation of the at least one voice interaction, comparing the at least one

digital signal to at least one reference standard that includes at least one known

vocabulary, and matching the at least one digital signal to at least one of words and

phrases contained in the at least one reference standard" (col. 1, lines 44-54; col. 4,

lines 51-58; col. 5, lines 4-27). Therefore, it would have been obvious to one of the

ordinary skill in the art at the time of the invention to use a well-known voice recognizer

as teaches by Rtschev in the invention of Garcia, in view of Shambaugh and Yuschik

and Young, because Rtschev teaches his invention provides for real-time conversation

between the system and the user (col. 3, line 66 to col. 4, line 2).

As per claim 17 and 19, Garcia, in view of Shambaugh and Yuschik and Young,

do not explicitly teach, "script includes defining at least one score assigned by the at

least one automatic speech recognition component". However, Rtschev teaches, "script

includes defining at least one score assigned by the at least one automatic speech

recognition component" (col. 5, lines 47-67). Therefore, it would have been obvious to

one of ordinary skill in the art at the time of the invention to use Rtschev's teaching in

the invention of Garcia, in view of Shambaugh and Yuschik and Young, because

Rtschev teaches his invention provides for real-time conversation between the system

and the user (col. 3, line 66 to col. 4, line 2).

As per claims 21 and 22, Garcia, in view of Shambaugh and Yuschik and Young,

do not explicitly teach, "a comparison of data representing an actual duration of the at

least one interaction to data representing an expected duration parameter associated

with the at least one interaction". However, Rtschev teaches, "a comparison of data

representing an actual duration of the at least one interaction to data representing an

expected duration parameter associated with the at least one interaction" (col. 9, lines

1-22). Therefore, it would have been obvious to one of ordinary skill in the art at the time

of the invention to use Rtschev's teaching in the invention of Garcia, in view of

Shambaugh and Yuschik and Young, because Rtschev teaches his invention provides

for real-time conversation between the system and the user (col. 3, line 66 to col. 4, line

2).

Conclusion

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to ERIC YEN whose telephone number is (571)272-4249.

The examiner can normally be reached on M-F 7:30-4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Richemond Dorvil can be reached on 571-272-7602. The fax phone

number for the organization where this application or proceeding is assigned is 571-

273-8300.

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EY 7/25/09
    /Eric Yen/
    Examiner, Art Unit 2626